

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

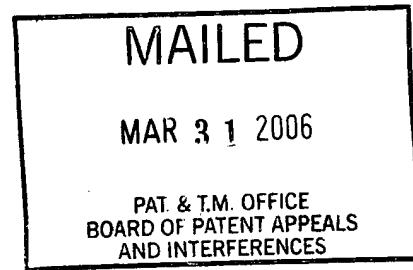
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte RASSOLL RASHIDI

Appeal No. 2005-2407  
Application 09/232,866<sup>1</sup>

ON BRIEF



Before LEE, TORCZON and MOORE, Administrative Patent Judges.

LEE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's rejection of applicant's claims 1-6, 41-45, 48, and 49.

References relied on by the Examiner

Stevens-Wright et al. ("Stevens 527")	5,462,527	October 1995
Stevens-Wright ("Stevens 852")	5,383,852	January 1995
Falwell et al. ("Falwell")	5,944,690	August 1999

<sup>1</sup>

Application for patent filed January 15, 1999. The real party in interest is Cardiac Assist Devices, Inc.

**The Rejections on Appeal**

Claims 1, 6 and 41 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Stevens 527.

Claims 2-5, 42-45, 48 and 49 stand rejected under 35 U.S.C. § 103 as being unpatentable for obviousness over Stevens 527.

**The Invention**

The invention is directed to an electrophysiology/ablation catheter. The catheter includes a tubular casing and a plurality of electrodes disposed at a distal end of the casing. The catheter includes two “flexible tension/compression members” extending in the hollow of the casing from the distal end to the proximal end of the casing. The catheter includes a handle having an actuator moveable in opposite directions. When the actuator is moved, it effects longitudinal tensioning of the first of the two tension/compression members and simultaneous longitudinal compressing of the second of the two tension/compressing members to move the distal end of the casing in a desired direction. According to a preferred embodiment, depending on the direction of movement of the actuator, an opposite one of the two tension/compression members is placed in tension and an opposite one of the two tension/compression member is compressed, and the resulting direction of the distal end if different.

Claims 1 and 41 are reproduced below:

41. An electrophysiology/ablation catheter comprising:
  - a) an elongated flexible hollow casing having a proximal end and a distal end and a plurality of spaced electrodes disposed at the distal end thereof;

- b) first and second flexible tension/compression members disposed and extending in the hollow of said casing from a point of attachment adjacent said distal end to said proximal end of said casing;
- c) an electrical lead connected to each of said electrodes and extending through the hollow of said casing to the proximal end thereof, said lead adapted for external connections thereto;
- d) a flexible spacer disposed between the first and second flexible tension/compression members at said distal end for maintaining lateral spacing between said members; and
- e) a handle including an actuator moveable in opposite directions and operative for effecting upon movement longitudinal tensioning of the first tension/compression member and simultaneous longitudinal compressing of the second tension/compression member with respect to the casing which effects lateral displacement of the distal end of the casing in a desired direction.

1. An electrophysiology/ablation catheter comprising:

- a) an elongated flexible hollow tubular casing having a proximal end and a distal end and a plurality of spaced electrodes disposed at the distal end thereof;
- b) a pair of flexible tension/compression members disposed in side by side relationship and extending in the hollow of said casing from a point of attachment adjacent said distal end to said proximal end of said tubular casing;
- c) an electrical lead connected to each of said electrodes and extending through the hollow of said tubular casing to the proximal end thereof, said lead adapted for external connections thereto;
- d) spacer means disposed between said pair of flexible tension/compression members at said distal end for maintaining lateral spacing between said members, said spacer means being flexible; and
- e) a handle including an actuator moveable in opposite directions and operative for effecting upon movement in one direction longitudinal tensioning of a first of said tension/compression members and simultaneous longitudinal compressing of the second of said tension/compression members with respect to

said casing which effects lateral displacement of said distal end of said casing in one direction and upon movement in a direction opposite said one direction operative for effecting longitudinal tensioning of the said second of tension/compression members with respect to said casing which effects lateral displacement of said distal end of said casing in a direction opposite said one direction.

All rejected claims depend either directly or indirectly from claim 41 or claim 1.

### Discussion

A. The anticipation  
rejection of Claims 1, 6 and 41

To establish anticipation under 35 U.S.C. § 102, each and every element in a claim, arranged exactly as is recited in the claim, must be found in a single prior art reference. Karsten Mfg. Corp. v. Cleveland Golf Co., 242 F.3d 1376, 1383, 58 USPQ2d 1286, 1291 (Fed. Cir. 2001); Glaxo, Inc. v. Novopharm, Ltd., 52 F.3d 1043, 1047, 34 USPQ2d 1565, 1567 (Fed. Cir. 1995). See also In re Spada, 911 F.2d 705, 707, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

The appellant correctly states that per each claim on appeal, when the actuator is moved, one of the two flexible tension/compression members must experience longitudinal tensioning and the other of the two flexible tension/compression members must simultaneously compress. The examiner has identified pull cables 32a, 32b, 32c, and 32d in Stevens 527 as satisfying the claim recitation of two flexible tension/compression members. Stevens 527, in column 4, lines 43-52, states:

In the illustrated embodiment, two pull cables 32a and 32c (referred to in this description as a horizontal pull-cable pair) are used to control bending of the proximal section 15 within a horizontal lane of orientation as shown diagrammatically in FIG. 2. The other two pull cables 32b and 32[c] (referred to

in this description as a vertical pull-cable pair) are used to control bending of the distal section 16 within a vertical plane of orientation. Thus, left-right proximal bending and/or up-down distal bending of the tip assembly are possible.

In the final Office action (Paper No. 24), and referring to cables 32a-32d of Stevens 527, the Examiner stated on page 2 that Stevens 527 discloses a handle including an actuator 12 moveable in opposite directions for effecting simultaneous tension and compression “in the respective pull members” for displacing the distal end of the catheter.” The final rejection on page 3 specifically discusses Figure 13a, which illustrates the pair of cables 32a and 32c. It is noted that the pair of cables 32b and 32d are illustrated in Figures 13d-f of Stevens 527.

Regarding cables 32a and 32c illustrated in Figure 13a of Stevens 527, the appellant asserts that as shown cable 32a is tensioned to direct the distal end of the catheter to one side, while cable 32c embodies “slack,” identifying the curvy portion of cable 32c. The appellant argues that because cable 32c has slack, it is not compressed in the longitudinal direction as is required by the appellant’s claims. The examiner, on the other hand, states (Answer at 3): “The showing in Fig. 13a of cable 32c could equally as well be a showing of a cable that is buckling (i.e., a cable that is under compressive force).” The examiner has gone even a step further, citing additional evidence sufficient to establish a *prima facie* case that cable 32c in Figure 13a of Stevens 527 is buckling under compressive force.

The examiner applies the principle of inherency. A claim feature is inherently met by a reference only if the feature is necessarily present in the reference. Transclean Corp. v. Bridgewood services Inc., 290 F.3d 1364, 1373, 62 USPQ2d 1865, 1871 (Fed. Cir. 2002). It is

not sufficient for inherency that a result may occur – it must invariably happen. Scaltech Inc. v. Retec/Tetra, LLC., 178 F.3d 1378, 1384, 51 USPQ2d 1055, 1059 (Fed. Cir. 1999); see also MEHL/Biophile International Corp., Milgraum, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305 (Fed. Cir. 1999). But the examiner’s burden is not mile high. The examiner need only establish that the feature at issue is necessarily there by a preponderance of the evidence.

To show that cable 32c in Stevens 527 as shown in Figure 13a is inherently under longitudinal compression, the examiner cites to two additional references, Falwell and Stevens 852. The examiner finds (Paper 24, p.4) that Falwell, Stevens 852, and Stevens 527 are all assigned to the same assignee, which finding is not disputed by the appellant. The examiner finds (Paper 24, p.4) that Figures 13a-13f of Stevens 527 are identical to Figures 13a-13f of Stevens 852, which finding is not disputed by the appellant. The examiner finds (Paper 29, pp. 3-4) that Stevens 852 is drawn to the same basic structure as that of the Stevens 527 patent, which finding is not disputed by the appellant. The examiner further finds (Paper 29, p.3) that Falwell explicitly states that mechanisms for steering catheters typically include control cables which are operated in such a manner so as to place one of the cables in tension while simultaneously compressing or buckling the other wire and that an example of such mechanism may be found in Patent No. 5,383,852 (Stevens 852), which finding is not disputed by the appellant. The pertinent part of Falwell is reproduced below (column 1, lines 38-47):

The proximal ends of the wires are mounted to a slider mechanism that responds to the operator to place one of the wires in tension, pulling at the catheter end for deflection in a first direction, while simultaneously compressing, or buckling, the other wire. An example of such a catheter configuration incorporating such a control mechanism may be found in U.S. Pat. No. 5,383,852, assigned to the assignee of the present invention.

The examiner's position is that because all three Stevens 527, Stevens 852, and Falwell are owned by the same assignee, because Stevens 852 is drawn to the same basic structure as that in Stevens 527, because Stevens 852 contains the same Figures 13a-13f as Stevens 527, and because Falwell describes Stevens 852 as having one cable in tension while another cable under compression, cable 32c in Stevens 527 is inherently experiencing compressive forces.

Although we do not know why Falwell describes Stevens 852 as having a control mechanism wherein one cable under goes tensioning while the other undergoes compression, Falwell and Stevens 852 constitute sufficient evidence for the examiner to rely on in making out a *prima facie* case that that is how one with ordinary skill in the art would view the pair of cable 32a and 32c or 32b and 32d in Stevens 527.

In the final rejection (Paper 24 at 4), the examiner stated:

The examiner is not relying on the Falwell et al. reference to provide support for what is supposedly missing in the '527 patent, but rather is merely pointing to this reference as proof that the cables of the '527 patent are inherently tension/compression members. The Falwell et al. reference does not change what is already present in the Stevens-Wright patent (note MPEP 2112).

Similarly, in the examiner's answer at 4, it is stated:

The examiner is not relying on the Falwell et al. reference or the Stevens-Wright '852 reference to provide support for what is supposedly missing in the '527 patent, but rather is merely pointing to these references as evidence that the cables

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of the '527 patent are inherently tension/compression members. Neither the Falwell et al. reference nor the Stevens-Wright '527 reference change what is already present in the Stevens-Wright et al. patent (note MPEP 2112).

We agree with the examiner's characterization of the nature of his reliance on Stevens 852 and Falwell. The additional references are not relied on to add to the disclosure of Stevens 527, but to demonstrate how one with ordinary skill in the art would view Stevens 527. As is indicated in Continental Can Co. USA Inc. v. Monsanto Co., 948 F.2d 1264, 1269, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991), the anticipation requirement that every claim feature must appear in a single reference accommodates situations where the common knowledge of the technologists is not recorded in the reference. The examiner has sufficiently made out a *prima facie* case of anticipation by inherency, which the appellant has failed to rebut with persuasive rebuttal evidence. Argument of counsel cannot take the place of evidence lacking in the record.

Meitzner v. Mindick, 549 F.2d 775, 782, 193 USPQ 17, 22 (CCPA), cert. denied., 434 U.S. 854; see also In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974) ("Attorney's argument in a brief cannot take the place of evidence.").

We reject the appellant's argument on page 5 of the appeal brief that because catheter sections 10, 15 and 16 in Stevens 527 themselves behave as compressive members a corresponding one of the pull cables does not act as a compressive member. As is noted by the examiner, the text in column 6, lines 25-46 of Stevens 527 "merely explain that sections of the distal end of the catheter can be bent about a number of points independently of one another by pulling selected pairs of pull cables – each pair of pull cables being associated with a specific

section of catheter" (Answer at 4). What that has to do with excluding the cables themselves from compressing has not been well explained or established by the appellant on this record.

For all of the foregoing reasons, the rejection of claims 1, 6, and 41 under 35 U.S.C. § 102(b) as being anticipated by Stevens 527 is affirmed.

B. The obviousness rejection of claims  
2-5, 42-45, 48 and 49 over Stevens 527

The appellant has not separately argued the merits of dependent claims 2-5, 42-45, 48 and 49, beyond the argument advanced in connection with the rejection of claims 1, 6 and 41 as discussed above. Accordingly, these claims shall fall together with independent claims 1 and 41.

The rejection of claims 2-5, 42-45, 48 and 49 under 35 U. S.C. § 103 as being unpatentable for obviousness over Stevens 527 is affirmed.

Conclusion

The rejection of claims 1, 6 and 41 under 35 U.S.C. § 102(b) as being anticipated by Stevens 527 is affirmed.

The rejection of claims 2-5, 42-45, 48 and 49 under 35 U.S.C. § 103 as being unpatentable for obviousness over Stevens 527 is affirmed.

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No time period for taking any subsequent action in connection with this appeal  
may be extended under 37 CFR § 1.136(a)(1)(iv).

**AFFIRMED**

/ss/      Jameson Lee	)	
JAMESON LEE	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
/ss/      Richard Torczon	)	BOARD OF PATENT
RICHARD TORCZON	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
/ss/      James T. Moore	)	
JAMES T. MOORE	)	
Administrative Patent Judge	)	

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